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**ABSTRACT**

"A method for forming a DMOS device and a DMOS device"

A method for forming an LDNMOS (1) and LDPMOS (2) in a CMOS process  
5 comprises forming the LDNMOS (1) and LDPMOS (2) to a stage where a gate (14)  
is laid down on a gate oxide layer (12) and a locos (9) is formed over the respective  
N and P-wells (4) and (5) of the LDNMOS (1) and LDPMOS (2). A P-body (15) is  
formed in the N-well (4) of the LDNMOS (1) by implanting a boron dopant in two  
stages, in the first stage at a first tilt angle ( $\theta$ ) of  $45^\circ$  for forming the P-body (15)  
10 beneath the gate (14) for determining the source/drain threshold voltage, and  
subsequently at a second tilt angle ( $\Phi$ ) of  $7^\circ$  for extending the P-body (15)  
downwardly at (25) for determining the punchthrough breakdown voltage of the  
LDNMOS (1). The formation of an N-body (16) in a P-well (5) of the LDPMOS (2) is  
similar to the formation of the P-body (15) with the exception that the dopant is a  
15 phosphorous dopant.